

ABSTRACT

Methods, systems, computer program products, and methods of doing business by improving the scheduling of execution of jobs for or by network-connected devices, thereby enabling the job execution process to scale more easily, efficiently, and effectively to support large numbers of devices and/or users. Examples of jobs include, but are not limited to, distribution of resources (including software, configuration information, images, and other types of content) to a device, fetching a device's inventory information, backing up a device's contents, and so forth. Jobs are programmatically scheduled based upon a specified time interval, according to a class of the requester. Only if an earliest start time after which the job may be executed for this requester has been reached will the job be executed; otherwise, the job execution is delayed. The disclosed techniques lessen the need for additional servers to handle spikes in processing load, reduce the likelihood of reaching system overload, and reduce the likelihood of cascading failures that may occur when systems are overloaded.